

CLAIM

A quartz oscillator comprising:

a base having a recessed portion provided on one face thereof by processing to have an inverse mesa shape;

a quartz thin-film formed on the other face of the base by epitaxial growth to have a thickness of 10 μm or less;

a vibrating reed portion; and

excitation electrodes for mechanically supporting the quartz thin-film and for vibrating the vibrating reed portion.